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Deep Draft Composite Fender Update
&
JLOTS 04 Demonstration and Experimentation Plan

Jeff Green
NSWCCD
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Existing Fenders

filled sausage fenders

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Problem

- Existing fenders not sea state 3 capable
  - Fender failure
  - Interface issues due to different lighterage configurations

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Deep Draft Composite Fender

Design Features

- High-strength composite construction
- Configured for use with wide range of lighters
- Provides 6-foot standoff
- Provides low pressure on hull of ship
- Deep draft / high inertia stability features
- ‘Unsinkable’ construction
- Highway transportable

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Deep Draft Composite Fender

Principal Characteristics, Transport & Stowed

Length……38’

Width……6’

Height……8’

Weight…12.3 LT

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Deep Draft Composite Fender

Principal Characteristics, Deployed

Length……17’

Width……6’

Height……18’

Draft……13’

Weight….15 LT

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Testing Results To Date

- Nov-Dec 02
  - Pierside testing on Flicktertail State
    -
    -

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Testing Results To Date

- Results
  - Fender operated as expected
  - New deployment system devised

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Testing Results To Date

- Oct 03
  - At-sea testing on Flicktertail State
    - Handling & deployment
    - LCU-2000 & LCM-8 interface

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Testing Results To Date

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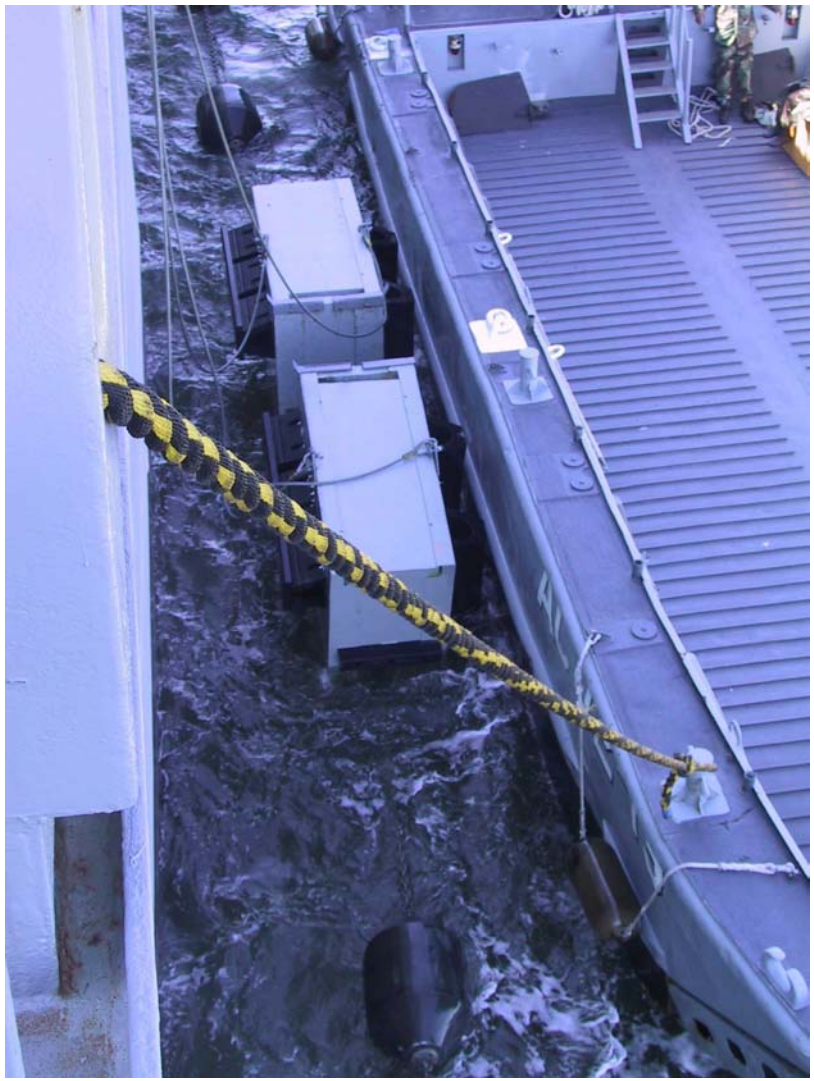
Testing Results To Date



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Testing Results To Date

- Results
  - Successful interface & sea state 3 performance
  - Required improvements identified

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Current Effort

- Improvements
  - Locking mechanism
  - Cushion coverage
  - Deployment
- Testing
- Final Redesign & Project Report

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JLOTS ‘04 - Feb 15-28

- Puerto Castilla, Honduras
- Flickertail State
- Cape Trinity
- HSV-2 Swift
- Army & Navy lighterage

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JLOTS ‘04 - Feb 15-19

- Flickertail State offload
  - DDCF
  - PCS
  - SRMS
  - Ship motions, wave environment, throughput

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JLOTS ‘04 - Feb 21

- Flickertail State & HSV-2 Swift demonstration
  - DDCF
  - PCS

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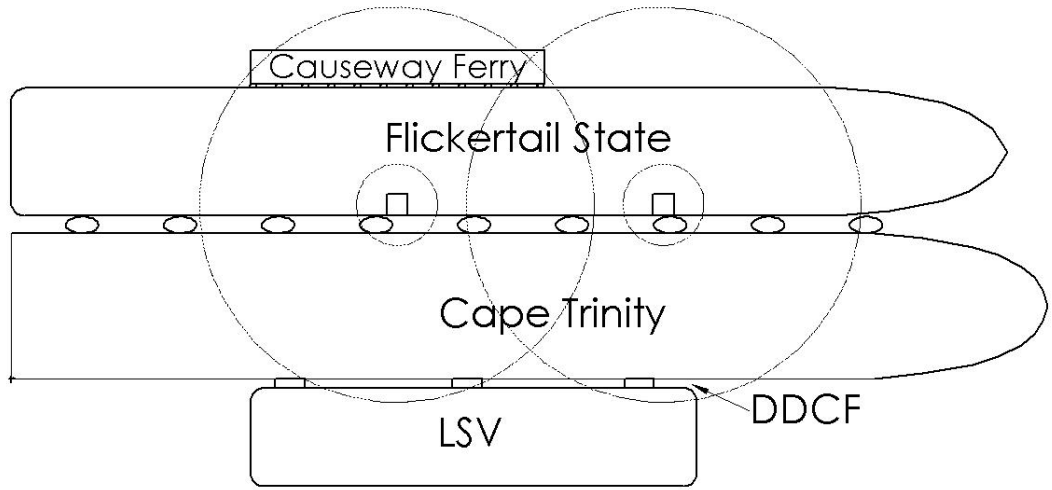
JLOTS '04 - Feb 22

- Flickertail State/Cape Trinity alongside operation
  - PCS
  - DDCF



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JLOTS '04 - Feb 23-26

- Cape Trinity RO/RO operation
  - Offload to HSV-2, LSV, LCU-2000
  - Testing of Ramp Monitoring System

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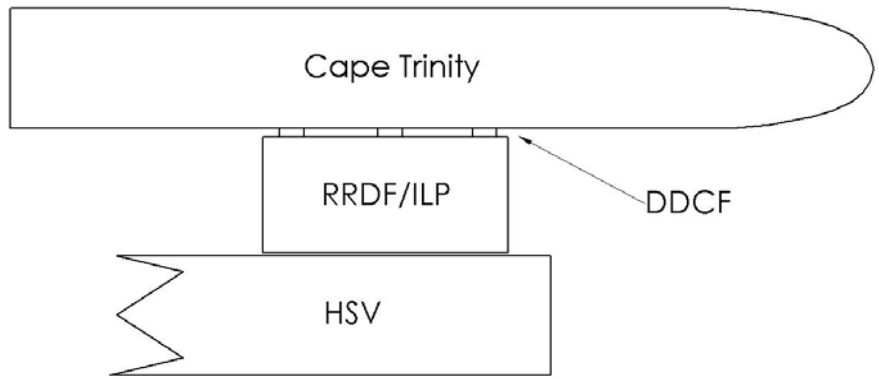
JLOTS '04 - Feb 27-28

- Integrated Landing Platform demonstration
  - RRDF positioned alongside Cape Trinity
  - DDCFs used for fendering
  - HSV-2 mooring
  - Motions data, heading control, lee effect



Questions?